TABLE NO.1 ROUND PIPE - CONCRETE - CORRUGATED STEEL - CORRUGATED ALUMINUM
MINIMUM CLASS OF CONCRETE OR MINIMUM THICKNESS OF STEEL AND ALUMINUM

PIPE DIAMETER (INCHES)	TYPE	MINIMUM COVER (INCHES)	HEIGHT OF FILL IN FEET ABOVE TOP OF PIPE 1 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90
12	CONCRETE	12	III .064	III .064	IV .064	V .064	V .064	V .064	V .064	V .064	V .064	V .064	V .064	V .064
	STEEL 1	12	.060	.060	.060	.075	.075	.075	.075	.075	.075	.075	.075	.075
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	V
15	CONCRETE	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
	STEEL 1	12	.060	.060	.060	.075	.075	.075	.075	.075	.075	.075	.075	.075
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	V
18	CONCRETE	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
	STEEL 1	12	.060	.060	.060	.075	.075	.075	.075	.075	.105	.105	.105	.105
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	V
24	CONCRETE	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.079	.079
	STEEL 1	12	.060	.060	.060	.075	.075	.075	.105	.105	.105	.105	.105	
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
30	CONCRETE	12	.064	.064	.064	.064	.064	.064	.064	.064	.079	.079	.109	.109
	STEEL 1	12	.075	.075	.075	.075	.105	.105	.105	.105	.135	.135		
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
36	CONCRETE	12	.064	.064	.064	.064	.064	.064	.079	.079	.109	.109	.109	.138
	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.079	.079	.079	.109	.109
	STEEL 2	12	.075	.105	.105	.105	.105	.135	.135	.135	.135			
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	12	.060	.060	.060	.075	.075	.105	.105	.105				
42	CONCRETE	12	.064	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138	.138
	STEEL 1	12	.064	.064	.064	.064	.064	.064	.079	.109	.109	.109	.109	.138
	STEEL 2	12	.105	.135	.135	.135	.164	.164						
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	12	.060	.060	.060	.075	.105	.105	.105	.135	.135			
48	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	12	.064	.064	.064	.064	.064	.064	.079	.109	.109	.109	.138	.138
	STEEL 2	12	.105	.105	.105	.164	.164							
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	12	.060	.060	.060	.075	.105	.105	.105	.135	.135			
54	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	12	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138		
	STEEL 2	12	.105	.105	.135	.164	.164							
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	12	.060	.060	.060	.075	.105	.105	.105	.135	.135			
60	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	12	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138		
	STEEL 2	12	.105	.135	.135	.164	.164							
	ALUM 1	12	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	12	.060	.060	.060	.075	.105	.105	.105	.135	.135			
66	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	12	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138		
	STEEL 2	12	.105	.135	.135	.164	.164							
	ALUM 1	18	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	18	.075	.075	.075	.105	.105	.105	.105	.135	.135			
72	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	12	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138		
	STEEL 2	12	.105	.105	.135	.164	.164							
	ALUM 1	18	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	18	.075	.075	.075	.105	.105	.105	.105	.135	.135			
78	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	12	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138		
	STEEL 2	15	.105	.135	.135	.164	.164							
	ALUM 1	18	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	18	.075	.075	.075	.105	.105	.105	.105	.135	.135			
84	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 1	15	.064	.064	.064	.064	.064	.079	.109	.109	.138	.138		
	STEEL 2	21	.075	.105	.105	.135	.164							
	ALUM 1	18	III	III	IV	V	V	V	V	V	V	V	V	
	ALUM 2	18	.075	.075	.075	.105	.105	.105	.105	.135	.135			
90	CONCRETE	12	.064	.064	.064	.064	.064	.079	.109	.138	.138	.168	.168	.168
	STEEL 2	18	.064	.064	.064	.079	.109	.109	.138					
	ALUM 2	24	.105	.105	.135	.164								
96	CONCRETE	12	.064	.064	.064	.079	.109	.109	.138					
	STEEL 2	18	.079	.079	.079	.109	.109							
	ALUM 2	24	.105	.105	.135	.164								
102	CONCRETE	12	.064	.064	.064	.079	.109	.109	.138					
	STEEL 2	24	.079	.079	.079	.109								
	ALUM 2	24	.135	.164	.164									
108	CONCRETE	12	.064	.064	.064	.079	.109	.109	.138					
	STEEL 2	24	.109	.109	.109	.109								
	ALUM 2	24	.135	.164										
114	CONCRETE	12	.064	.064	.064	.079	.109	.109	.138					
	STEEL 2	24	.109	.109	.109	.109								
	ALUM 2	24	.164	.164										
120	CONCRETE	12	.064	.064	.064	.079	.109	.109	.138					
	STEEL 2	24	.109	.109	.109	.109								
	ALUM 2	24	.164	.164										

IMPERFECT BACKFILL IS NOT REQUIRED FOR CONDITIONS SHOWN ON THE LEFT SIDE OF THE HEAVY LINE. USE NORMAL BACKFILL.

FOR CONDITIONS TO THE RIGHT OF THE HEAVY LINE, CLASS V CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO DETAIL "A" OR "B" ON SHEET 1 OF 3.

TABLE NO.2 INFORMATION ONLY	
CORR. METAL THICKNESS	EQUIVALENT GAGE
STEEL	
.064	16
0.079	14
0.109	12
0.138	10
0.168	8
ALUMINUM	
0.060	16
0.075	14
0.105	12
0.135	10
0.164	8

STEEL 1 OR ALUM 1 DENOTES CORRUGATION PROFILE 2 2/3" X 1/2"

STEEL 2 OR ALUM 2 DENOTES CORRUGATION PROFILE 3" X 1" (OR 5" X 1" FOR STEEL PIPE ONLY)

ALL STEEL AND ALUMINUM PIPE SHALL BE LOCK-SEAM OR WELDED-SEAM (HELICAL) CONSTRUCTION.

MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

TRENCH CONSTRUCTION IS REQUIRED FOR CONDITIONS ON BOTH SIDES OF HEAVY LINE. SEE SHEET 1 OF 3.

FOR CONDITIONS TO RIGHT OF HEAVY LINE, CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO SPECIFICATIONS AND THIS STANDARD.

TABLE VALUES FOR ALUMINUM CORRUGATED PIPE (OR ALUMINUM SPIRAL RIB PIPE) ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, fy=24,000 PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 (fy=20,000 PSI), THE TABLE NO.1 ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:

A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 INCHES BECOMES 13.8 INCHES)

B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FEET BECOMES 29.7-34.0 FEET)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.			

REVISION	DATE
GEN. REV. NOTES	9-26-00
ADDED SEAM CONST. NOTE	3-9-99

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
CONCRETE & METAL PIPE CULVERTS
SHEET 2 OF 3
(FILL HEIGHTS FOR CONCRETE & CORRUGATED METAL PIPE)

NO SCALE — OCTOBER 21, 1998

DES. ____ (SUBMITTED) STATE AIRPORT ENGINEER
DRW. ____
TRA. ____ (APPROVED) CHIEF ENGINEER
CHK. ____

NUMBER 1030D

street SMARTS

REVISION DATES

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE:

GEORGIA STANDARDS

SR 203 OVER DRY CREEK
BRIDGE REPLACEMENT
BR000-0005-00(572) 11/3/2011

DRAWING No. 41-002